

ABSTRACT OF THE DISCLOSURE

a Pigment protein derived from corals (PPCT), and polynucleotide molecules encoding the pigment protein are disclosed. The pigment protein is capable of emitting fluorescence upon irradiation by incident light, wherein maximal absorbance of the incident light is in the range of 320-600 nm, and maximal fluorescence emission is in the range of 300-700 nm. Uses of the pigment protein are also disclosed, especially as a tissue marker, fluorescent marker or general dyestuff.